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October 10, 2014

Town of Amenia Planning Board
Town of Amenia
4988 Route 22
Amenia, New York 12501

RE: Comments related to Silo Ridge's
August 21, 2014 submission

Dear Members of the Planning Board:

I have reviewed materials submitted in relation to the Silo Ridge Resort Community, which was found complete on August 21, 2014. The focus of my review relates to Visual Resources, but I also make additional comments on related issues.

Summary

This letter contains two major parts: Serious issues with the August 21 submission, and substantive comments. Serious issues include missing, incorrect or contradictory information, or a plan that which appears to violate the Town's code. I believe that all serious issues must be addressed, corrected and resubmitted to the Planning Board so that the public has an opportunity comment on these revisions.

This letter also includes substantive comments regarding my opinion on how the project could perform better and offer lower impacts, especially as they regard visual resources. The Planning Board may wish to consider these comments and ask the applicant to modify the project so that it has lesser impacts, particularly on the area's visual resources.

Part 1: Serious issues with the August 21 submission

Water tank

The site plan (sheet series C5) and the grading (C7) for the project do not match the plan for the water distribution system (C10.6), which shows a partially buried water tank, pump station, parking lot, circulation, and different grading, which does not match what is shown in C5 and C7. This is very serious for a number of reasons:

- The Planning Board cannot know what the applicant is actually proposing for this area as they have submitted conflicting information.

- C10.6 shows the water tank extending above grade with its eastern wall covered by a 12' by 100' retaining wall, which has a door to allow access to the tank. This is not shown on the visual simulations for the project.

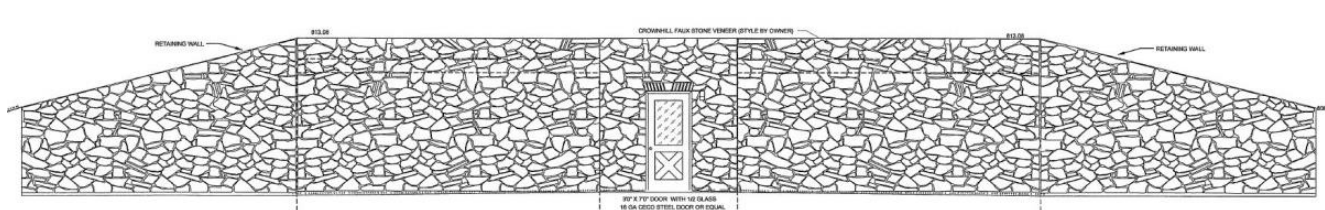


Figure 1: Detail of the wall shown in C10-8 covering the eastern part of the water tank. It is approximately 12 by 100 feet and not shown on the site plans for the project, nor the visual simulations

- The Master Development Plan (MDP) for the project states that no retaining walls will be taller than six feet.
- If the grading done for the water distribution system is put in place, the Planning Board cannot know if it will work with the stormwater management system, which was designed for different grading.
- The tank is shown on what appears to be open space for the project, but impervious surfaces like the tank and the pump station (and related ancillary components) cannot be considered open space.

The applicant must integrate the plan for the water tank and distribution system into the plans for the site, redo the visual analysis (if the tank remains visible), redo the grading, and examine that new grading's impact on the stormwater management system.

Further, all ancillary components of the tank must be shown in addition to the pumping station. These components may include a generator, access ports, vent pipes for an underground propane tank, and other components. All components must be shown in a design not only in plan, but in the visual analysis for the project, especially considering the visual sensitivity of the location.

Sensitive design of the tank, its siting, and perhaps even integration with the Artisan's Park overlook (to provide a hard, level surface that can act as a platform for the overlook, which is suggested in the Findings Statement) is a solution that the Board may wish to encourage the applicant to examine. Alternately, the Board may consider asking the applicant to move the tank out of the hairpin turn and place it in an undeveloped location on the northwestern portion of the site. This would keep the Artisan Park overlook and the water tank infrastructure separate, which may make dedication of the park to the Town more straight-forward.

Regardless of the final solution developed for water distribution, it must be consistent with the balance of the plans and it must be shown in the visual simulations if the tank or its components are visible. Currently, the visual

simulation does not show any components of Artisan Park or the water tank, and it should show both. Considering the sensitivity of the location, the plan for this area needs to be disclosed to the public in detail both visually and in plan.

Open space

Open space for the project shown on SP-4 of the MDP Plans exceeds the 80% open space requirement by slightly over 1 acre. This calculation, however, includes some space that according to the Town's zoning should not be counted as open space.

According to the Town's zoning the following areas can be considered open space for the purposes of the requirements of the Resort Development Overlay district:

A minimum of 80% of the total land area of the parcel shall be preserved by a conservation easement as open space, as provided in §121-20K, based upon the conservation analysis. Priority in open space protection shall be given to land within the SPO and SCO districts, especially the view to and from Delavergne Hill, ridgelines, historic resources, unique ecosystems, prime agricultural land, and water resources. *Open space land preserved under this subsection may include farmland and farm structures, ponds and streams, and recreational land such as golf courses, cross-country ski trails, equestrian trails, and hiking trails. It shall not include land lying under nonagricultural structures taller than 20 feet, non-agricultural buildings larger than 200 square feet in footprint area, or land that is covered by impervious surfaces other than trails or golf cart paths.* [Emphasis added]

The partially buried water tank, the pump station, and the related non-recreational paths and staircases used to service this infrastructure in the hairpin turn, are counted as open space, which clearly do not fit the definition that is in the definition of open space in the zoning code. Further, the golf academy building cannot be considered open space as it is a non-residential building over 200 SF. The impervious golf cart parking area around the golf academy and road hammerheads cannot be counted as open space. The following image identifies some of these smaller spaces counted as open space that should not be counted as open space:

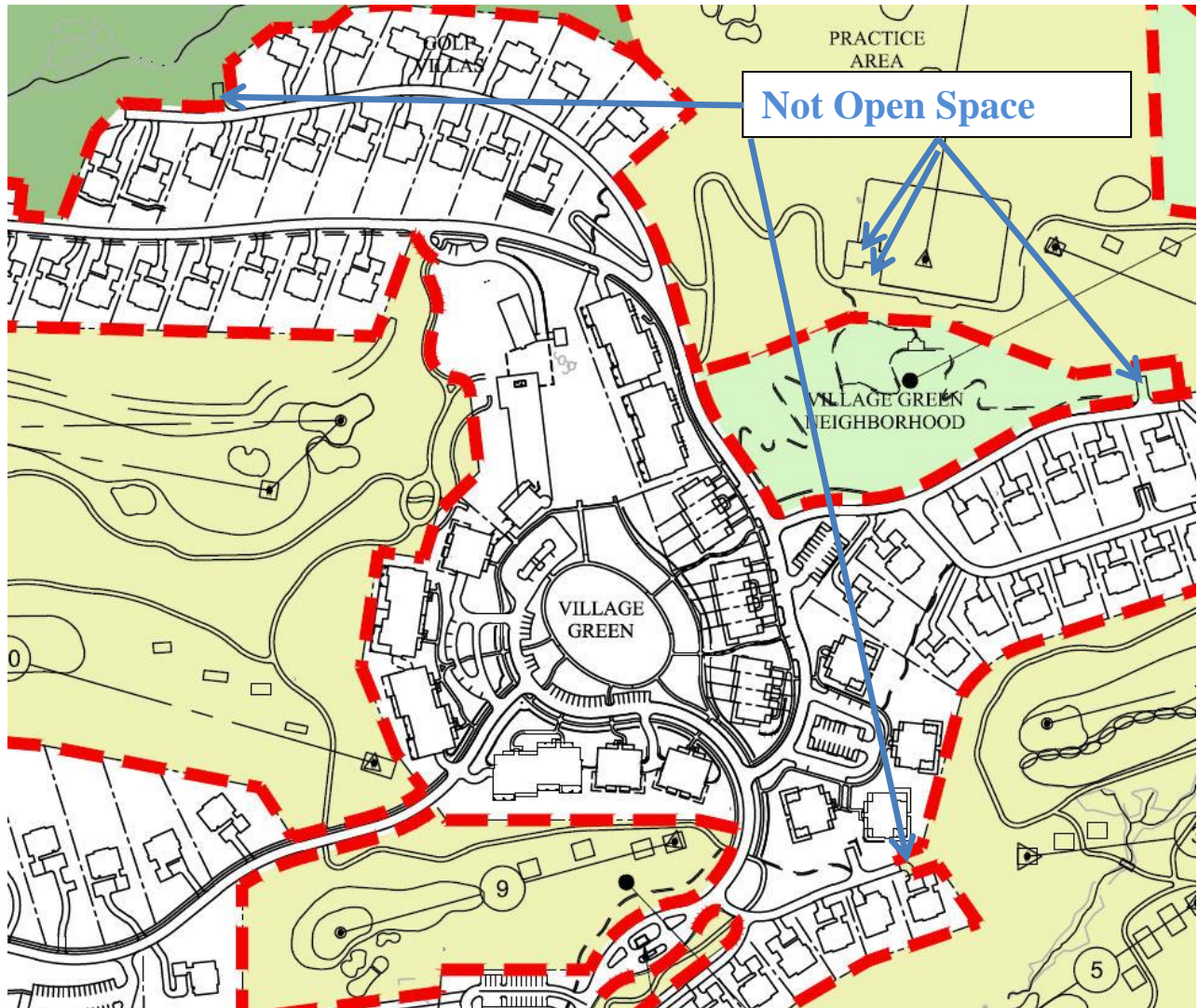


Figure 2: Detail of SP-04 from the MDP plans. Areas that are counted as open space, but which are not open space are marked

Further, the design for the golf academy on the C5 and C7 plan series do not match the plan for the golf academy in the open space plan, which would impact the amount of space that cannot be counted as open space. All plans must be internally consistent.

Finally, the preliminary plat shows an oddly shaped subdivision of land, including this roughly 35' by 600' strip¹ that is about 2/3 acre along the northern boundary of the site:

¹ At its narrowest it this piece is about 23 feet wide. At its widest, it is about 65 feet wide.



Figure 3: Detail of PL-1.05, with a long narrow strip applicant proposes to be created by subdivision. This strip ranges from 23 to 60 feet in width and is about 600 feet long

Previous versions of the MDP showed this strip as part of the lot for the Vineyard Cottages and it was not counted in the open space calculations. At minimum such odd spaces do not follow best practices for subdivision. The Planning Board should consult with DLC on if such spaces would meet their Conservation Easement Acceptance Criteria, which is required for all spaces on which they hold a conservation easement. Other areas identified as open space may also not meet DLC's criteria, and I encourage the Planning Board and the applicant to discuss the specifics of these criteria with DLC to ensure that DLC will agree to hold the conservation easement on all land counted as open space in SP-04.

At minimum, the applicant must redo the open space calculations excluding elements that should not be counted as open space. (The items identified above should not be considered exhaustive.) If the project no longer meets the 80% open space requirement, they could reexamine other spaces not currently classified as open space, which could potentially be counted as open space, such as the Village Green, or perhaps some of the wooded areas near the Phase 2 estate homes (see alternative design suggestions in Part 2.)

Landscaping

Landscaping is discussed in detail in Part 2 of this memo, but I note here that the plans submitted violate the requirements of the SPO's green buffer. The first 100 feet of the Road and Trail Visual Protection Corridor portion of the SPO has specific landscape requirements. Specifically: "This buffer shall consist of native trees and shrubs, as well as fields, meadows, and lawn areas." While I expect Dr. Klemens to have more extensive comments, I note that Concolor Fir is planned in sections along the roadway within the green buffer. This is a western pine that is not native to the area and is prohibited by the Town's zoning, and at minimum the plan for this area must be revised. There may be other non-native species planned in this area, but this is outside my area of expertise.

Retaining walls

The project calls for some very tall retaining walls. I believe that many of the taller walls will need a railing of some kind for safety purposes and these railings are not shown on the site plans. Railings would need to be shown on plans. But more than this minor omission, the Planning Board should consider if these very tall walls should exist at all. For instance, examine the following detail from Lot E-48:

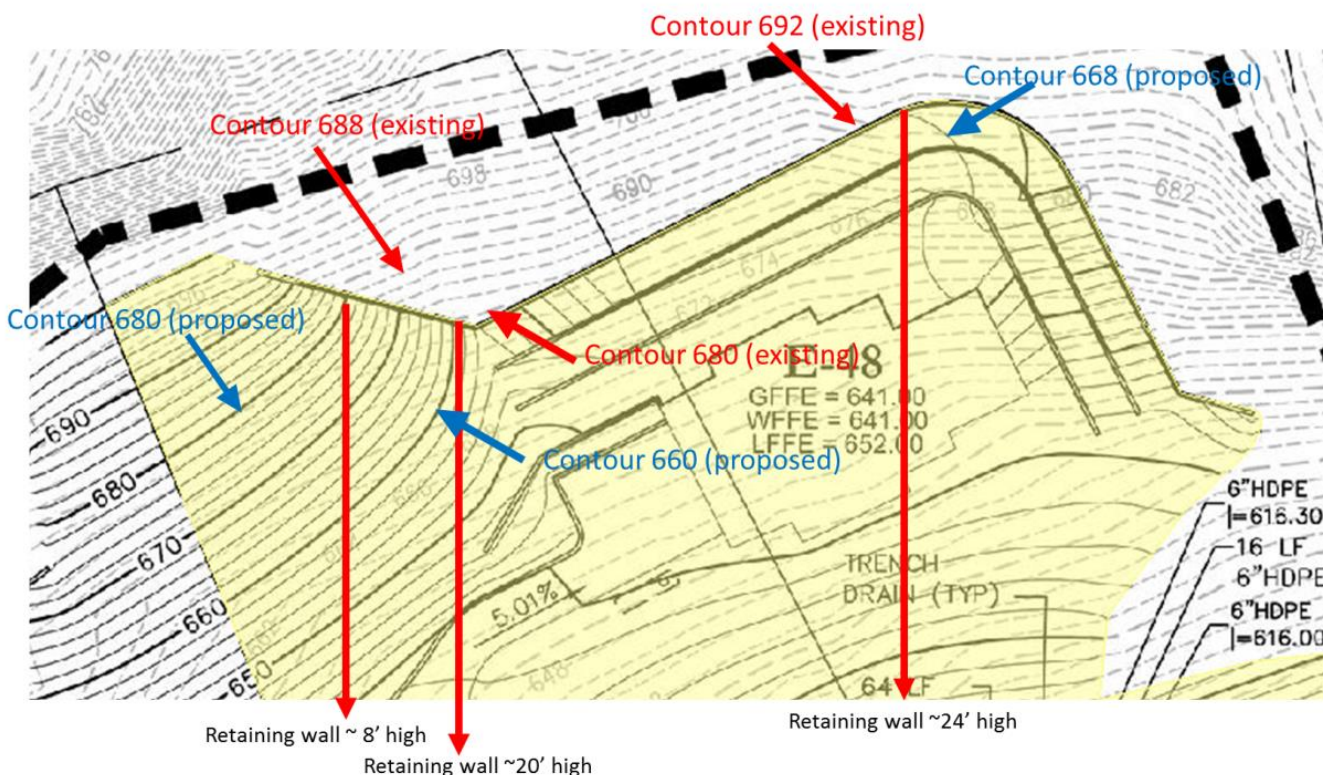


Figure 4: Detail of C7-08 showing the area being graded in yellow, with the implied height of some of the retaining walls called out

The implied height of the tallest retaining wall on this lot is measured in several places in the image above, and shows the wall is about 24 to 25 feet tall at its

tallest. This very tall wall is the last of three stacked retaining walls, which together cover about 40 feet in vertical elevation, which is taller than the proposed house.

The Board may want to consider some options that would allow the applicant to reduce the size of the retaining walls:

- If the area of disturbance is being minimized to meet the 30,000 clearing requirement of the SPO, the Planning Board may wish to consider waiving this requirement if the result is 40 vertical feet of retaining wall if these walls may be reduced by allowing more disturbance on the lot. This is a trade-off that should be considered carefully, however, and only as a last resort.
- More appropriately, the Planning Board should encourage the applicant to develop house designs that are more sensitive to changing topography, as directed by the Town's Rural Siting Guidelines (§121-31.G.) The lot for R-48 is for a house with one floor built into the hillside, with a small flat rear yard. A different design could build two or three floors into the hillside and allow for a sloping rear yard. The following is a section of a house that is designed for a steep hillside:²



Figure 5: Section through a house designed for development on steep upslope

The estate home lots are both difficult and spectacular sites for development and the Board should encourage lot designs that would

² This image is for illustrative purposes only. The roof violates architectural guidelines for development within the SPO.

require houses that respected existing topography. Such designs would likely reduce the amount of disturbance, lower retaining walls and lessen visual impacts. I note that the Findings Statement supports the concept of more sensitive design by encouraging the applicant to, “refine the design so as to further minimize impacts to steep slopes.”

- Encourage the applicant to consider more compact design that would allow difficult sites like E-48, which requires 40 vertical feet and 850 linear feet of retaining wall, to be left unbuilt.

Other issues with the retaining walls can be seen on the wall detail (S1.01), which only shows walls at a maximum of 11 feet. S1.01 should show the details for the tallest wall planned, which is at least 24 feet tall. Yet if this was done, the plans would be inconsistent with the Master Development Plan, which states that no retaining walls will be taller than six feet. The MDP, S1.01 and the C7 series all need to be made consistent.

Finally, while retaining walls are shown in Phase 1, it is not clear if the visual simulations for the project show any site retaining walls for Phase 2. If they do, they are not as apparent as the Phase 1 simulations. If the walls are missing, and these sites require retaining walls that are similar to the stacked structures that span 40 vertical feet that are planned for E-48, then the simulations are incomplete, as they are missing a material portion of the proposed plan. They would need to be redone to show the project as planned.

Tree survey and demolition plans

The boundary for the tree survey ends before the development does. The result is that heavily forested areas on the demolition survey are shown as if they have no trees or tree removal. For instance, consider the following details for the area around E-48:

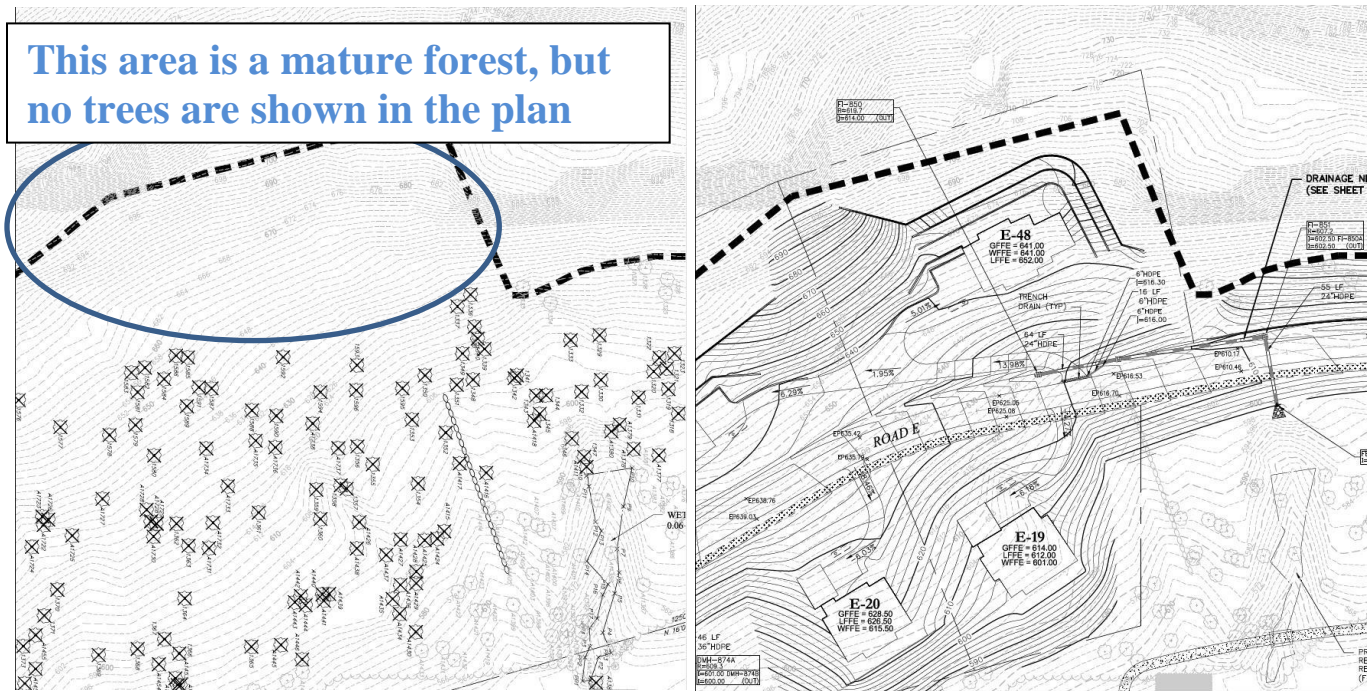


Figure 6: Detail of C3-08 on the left with the same area of C7-08 on the right. The circled area shows an area that will be developed where the tree survey did not cover. There is mature forest in the circled area

The image on the left shows the demolition plan for the existing trees on the site. The image on the right shows the grading plan and the houses for the same area. Mature forests cover the area where E-48 is planned, yet the tree survey shows that there are no trees beyond what would be the front yard. There are trees on this site and many of them will be cut. It appears that the tree survey also falls short in lots E-49, E-50, E-51, and E-53. The applicant must complete the tree survey.

The Findings Statement states that, “Construction on steep slopes (15-30%) - minimize footprint, minimize area of disturbance, leaving all trees undisturbed except where clearing is required for structures, utilities or roadways.” Instead, the plan is to remove virtually all trees within the limit of work, especially on steep slopes. For example, consider the following estate home detail:



Figure 7: Detail of C3-06 on the left, with a detail of the same area on C7-06. Every tree within the limit of work on the Estate Home lots is cleared, regardless if the area is being graded

The demolition plan on the left shows every tree on the up-slope Estate Home lots within the limit of work will be cleared, regardless of the need to grade the area. Many of the trees in areas that are not graded could be saved and according to the Findings and zoning, they should be saved.³ The Findings Statement states: “Cutting of existing vegetation will be minimized by field surveying each building site including trees 8" caliper and larger prior to site plan submission *and custom designing each building for the site.*” [Emphasis added.]

The Planning Board should ask the applicant to examine every lot and tree and work to minimize the footprint, area of disturbance and leave trees undisturbed if building or grading does not require removal.

Wastewater Treatment Facility

Existing conditions for the Wastewater Treatment Facility is missing from the C2 series. Existing conditions need to be shown so that the proposed changes to the site can be understood. Also, the landscaping around the facility in addition to being inadequate, labels the number of sugar maples to be planted as “To Be Determined” (L3.26). Site plan review requires more specific information.

Further, the Findings Statement states regarding the facility’s tanks that, “All tanks within 500 feet of other structures shall be placed inside the treatment plant as originally proposed in the DEIS.” The applicant needs to show that the outdoor tanks are further than 500 feet from other structures and should provide a plan showing nearby structures and a line that marks a 500 foot radius from the tanks.⁴

Finally, L3.26 appears to have been made from a low resolution image. It is nearly impossible to read the scale or contour elevation numbers on both the

³ Standard 2 of the SPO states that development will minimize the removal of native vegetation. The rural siting guidelines direct Town’s Rural Siting Guidelines also discourage the clearing of trees near roads and it appears that many trees in the front of E-57 above could be saved.

⁴ It is clearly within 500 feet of the structure across Route 44, however, and the WWTP is discussed in detail in the substantive comments.

digital and the paper submission. The landscape plan for the WWTP should be revised as detailed herein, and resubmitted at a resolution that allows it to be read.

Extensive substantive comments regarding the WWTP can be found in Part 2.

Standards for development in the SPO

Some of the development is covered by the Town's Scenic Protection Overlay (SPO), and there are standards for development within the SPO. For development within the SPO, the applicant needs to demonstrate how the plan meets SPO development standards, or in places where it does not meet the standards, where waivers will be required. There is only one waiver regarding the SPO that is being sought.⁵

The SPO limits clearing to the building site area for a single family residence to 30,000 SF, excluding driveway and utility access. The building site area needs to be shown on each lot in the SPO and labeled "building envelope." The building envelope is not shown on the plans as required for development in the SPO. In addition to showing the building envelope, the applicant must demonstrate on the plan for each lot that the building envelope is less than 30,000 SF. If the area is more than 30,000 SF then the applicant would have to request a waiver.

Part 2: Substantive Comments on the August 21 Submission

The following comments are substantive comments, which the Planning Board may wish to consider when discussing changes to the plan with the applicant.

Landscaping

The Planning Board should consider requiring changes to the landscaping plan to preserve the views along Delavergne Hill. Currently, the plan calls for a thick vegetative buffer along much of Lake Amenia Road and Route 44 at the north end of the site. This buffer primarily screens the public view of the golf course. The golf course is a part of the 80% open space requirement of the RDO; as such it should be considered an attractive element and views to it should be enhanced, not blocked. As currently proposed, landscaping at the project edge will remove public views of this preserved open space. For instance, consider the following detail from L3-02:⁶

⁵ According to the August 6, 2014 letter from Peter Wise, that is for the minimum width of the green buffer.

⁶ This version was sent by Silo Ridge to the Town's consultants on 9.29.14 and shows certain species color coded.

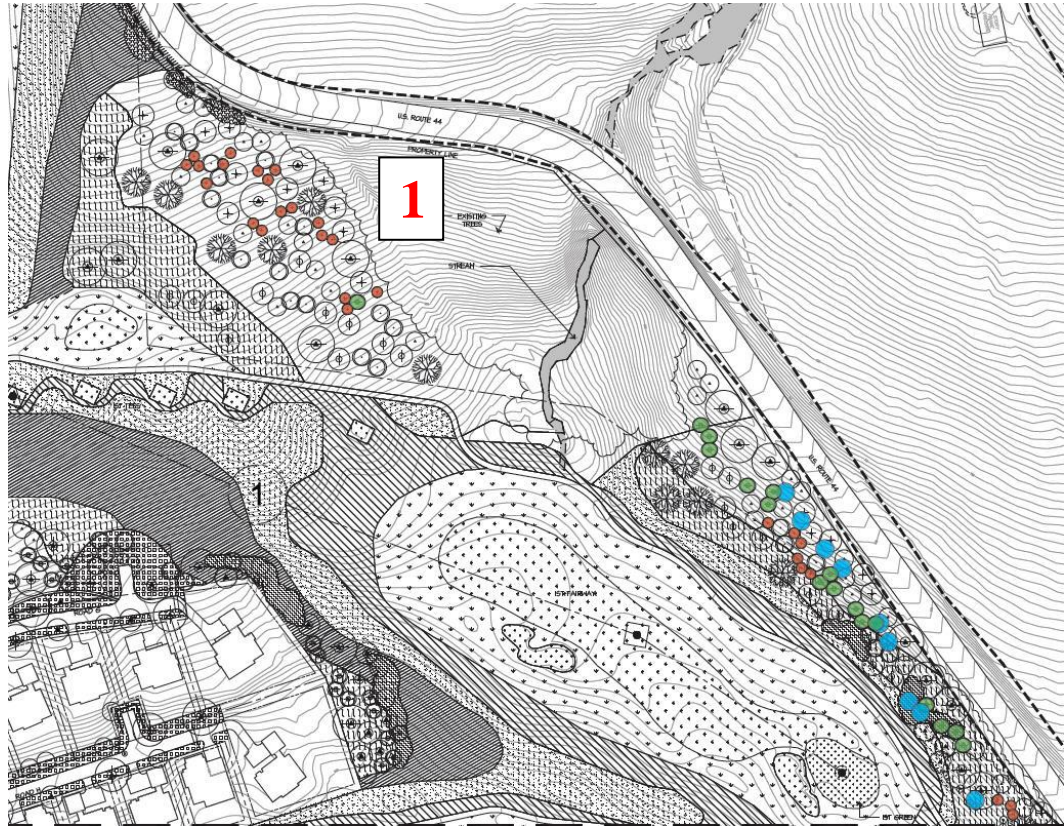


Figure 8: Detail of L3-02 showing the thick landscaped screen planned for the lower portion of Route 44. The red “1” marks an area of existing forest that could be narrowed to allow for better views

With a vegetative buffer of between 100 and 200 feet planned for the southern roadside of Route 44, the public will effectively have no view of the golf course from this part of the roadway. The next detail shows this buffer continuing along Route 44 and Lake Amenia Road, abated only for the utility easement and sensitive archeological area.

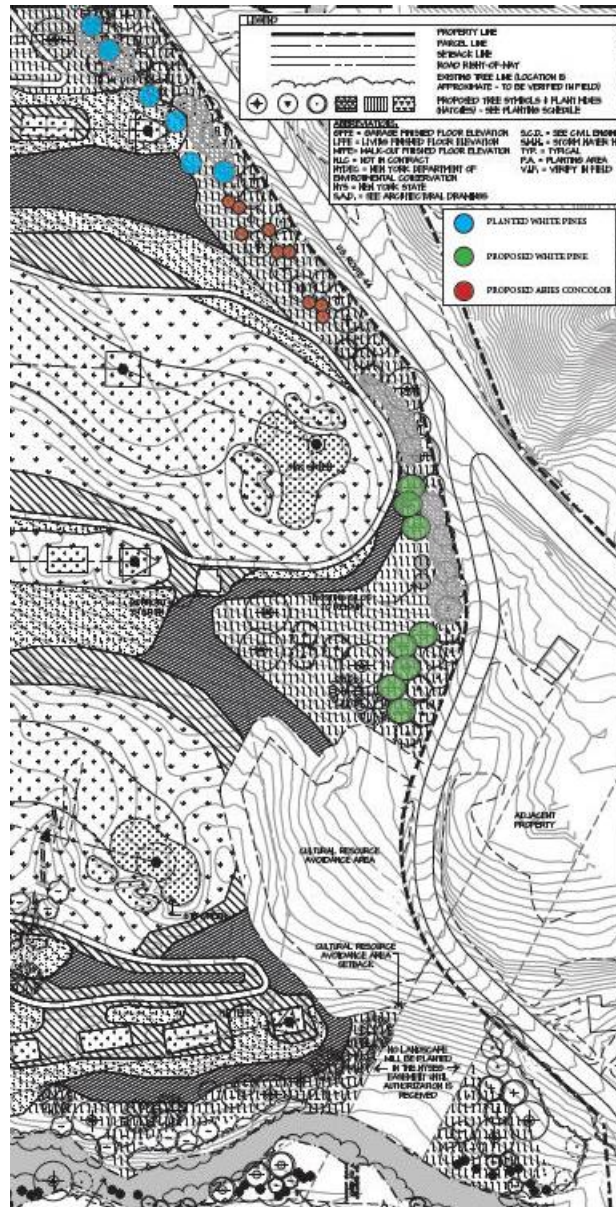


Figure 9: Detail of L3-01 showing the thick landscaped screen planned for the lower portion of Route 44 and Lake Amenia Road

While these trees will screen some views of buildings, they primarily screen views to the golf course. I recommend that this area be left completely open, as meadow or lawn so that the view to the golf course is maintained and since any buildings they would screen would be far in the distance.

Further, the Planning Board may wish to ask the applicant to cut some of the existing trees near the "1" label in Figure 7 above, outside a 100 foot buffer of the stream that runs through that woodland, as these have grown over time, and such clearing would open up views of the golf course. The cleared area could then be converted to a meadow or lawn. The Town's code states that activities in the

SPO: “Will minimize the removal of native vegetation, *except where such removal may be necessary to open up or prevent the blockage of scenic views and panoramas from publicly accessible places.*” [Emphasis added.] Partial removal of this stand of trees, along with a visually sensitive green buffer will help to open up these important public views.

The hedge and on-site landscaping

The hedge and equestrian fence proposed for the hairpin turn provides screening to the planned development to passengers as they are driven along Route 44 in the hairpin turn.⁷ From longer distance views, however, the hedge has little to no effect on screening views to the development, and will likely have little impact on views from the Artisan’s Park overlook, which will be about 30 feet over the elevation of the hedge on views looking down the Harlem Valley. While there is not an obvious answer to the landscaping in this area, the Planning Board may wish to consider the following changes:

- Remove the hedge and the equestrian fence shown in the landscape plans and the visual simulations along Route 44. While this will allow views to the development, it will keep the expansive views open to motorists. When combined with the landscaping recommendations, the view to the golf course and down the Harlem Valley will be clear and expansive. This will also help the project meet the SPO standard that prohibits fences in the green buffer.
- Reconsider the landscaping planned for some of the edges of the development that face Delavergne Hill and Depot Hill. This concept is to remove screening from near to the viewer (the hedge and buffer along 44), and add screening to development far from the viewer, close to the on-site structures. While landscaping would be visually porous, it would soften the effect of development on the landscape. For example consider the following detail of L3-02, which shows the outer edge of the houses planned for the Village Green neighborhood:

⁷ Drivers are presumably busy navigating the hairpin turn.

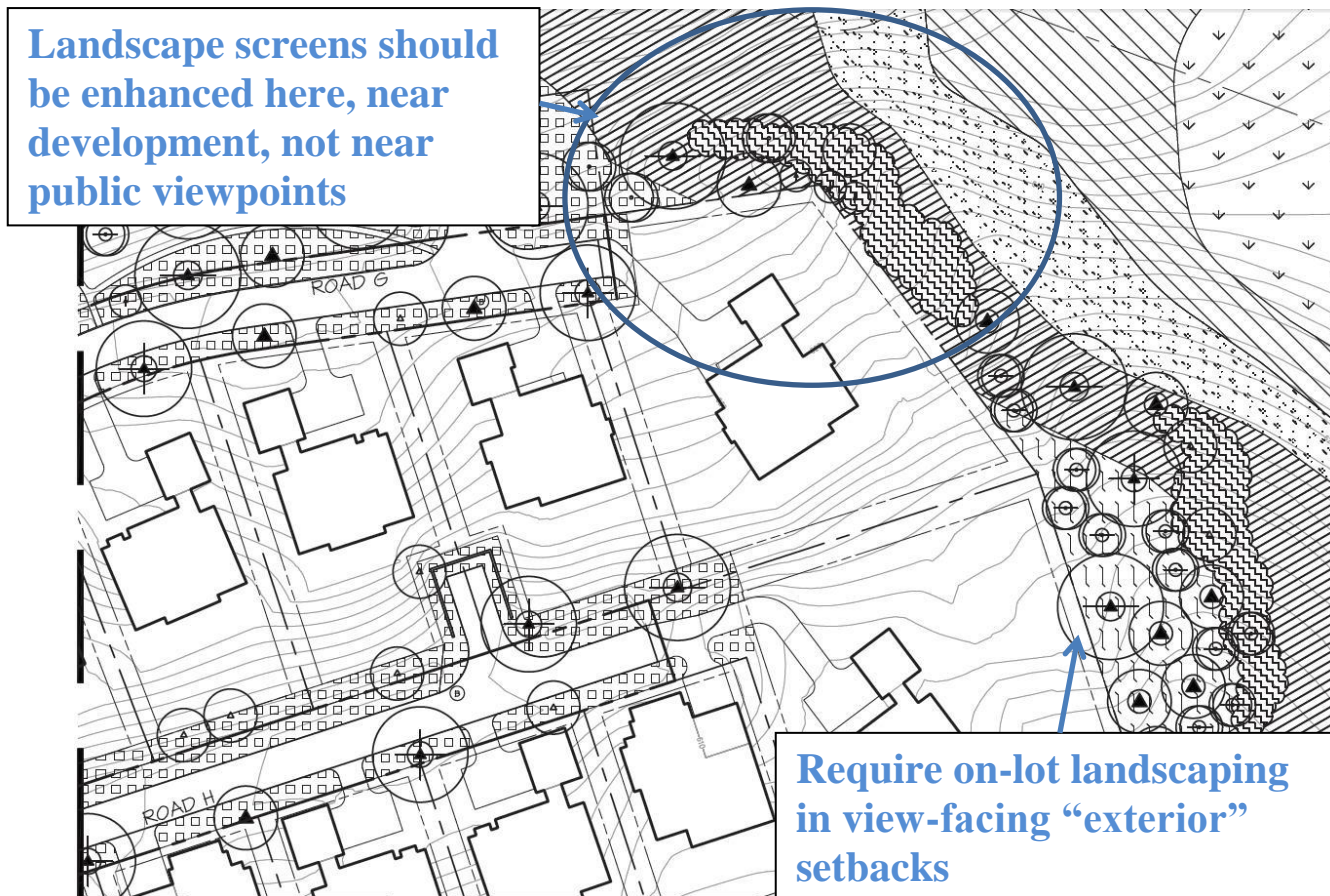


Figure 10: Detail of L3-02 showing part of the edge of the Village Green neighborhood

In places at the edge of the development, like the portion circled above, the proposed landscaping thins. The landscape screens currently proposed for lower portion of Route 44 belong in locations like this. In some places the distance between the lot and the golf course is not large, but the planted area could be expanded if vegetative screens are required in all exterior⁸ setbacks. Enhanced landscaping closer to the development and further away from the viewer will keep the views expansive, and in most cases, at a much lower elevation.

This landscape screen can be designed to screen distant views, but could also be designed to allow views out from the homes to the golf course. Such a design would likely include trees with substantial canopies that would screen views to the houses from distant viewpoints, but with the lower limbs trimmed to allow ground level views outward.

⁸ “Exterior setbacks” in this context means setbacks that bound the exterior, view-facing edge of the development. It would not include facing side setbacks, rear setbacks that back on to mature forests, or where setbacks are not visible from off-site locations. It is not a defined term in the Town’s code, but is merely used here as a descriptive term for setbacks that may be appropriate for vegetative screens.

Screening and landscaping the WWTP

The landscaping around the Waste Water Treatment Plant (WWTP) is not adequate. While there are many views that should be kept open, the view to the WWTP is not one of them. The landscape plan shown as L3-26 shows a handful of small, widely spaced trees between the facility and the road, and no screening planned between the facility and the utility easement, which it abuts to the west.

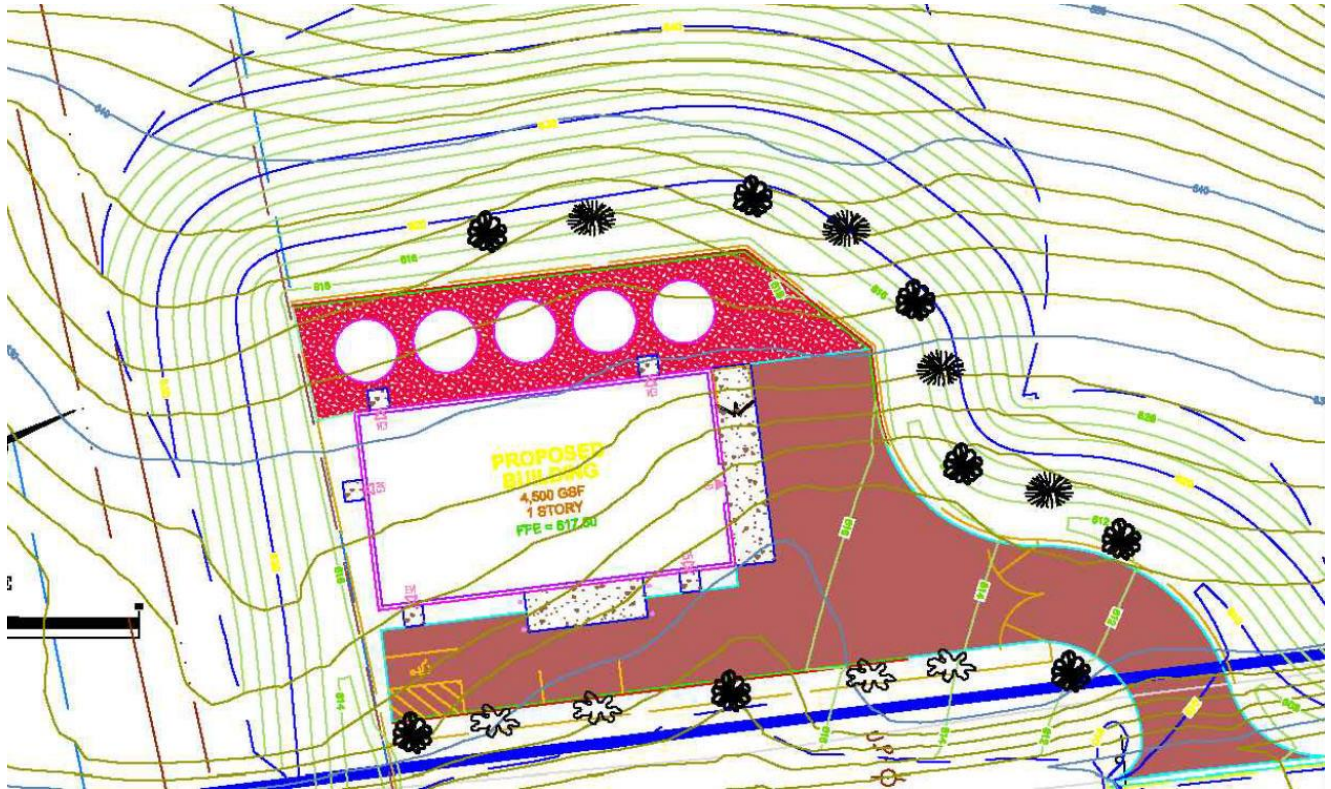


Figure 11: Detail of L3-26 showing the Waste Water Treatment Plant with proposed landscaping

The entire facility is in the Scenic Road portion of the SPO, and much of it is planned within the green buffer, for which the project needs a waiver. There are much better solutions for the Planning Board to consider for screening the facility.

A simple solution would be to increase the amount and kind of screening. The Board may wish to ask the applicant to consider a tall hedge which around the entire facility, which would be opaque and have the benefit of screening both the facility and the security fence.

I encourage the Planning Board to consider a more elegant solution, however; one which would involve rethinking how the site is graded and then landscaping around new grading. For instance, as currently proposed we see extensive site disturbance/grading and no retaining walls. This disturbance clears the wooded site in which the facility is planned and opens up lines of sight to the facility. A more visually sensitive design would instead develop a small earthen berm between the Route 44 and the parking lot, on top of which would have a thick

screening hedge, and behind which would be a security fence. The berm gives the hedge a larger effective screening height and may well provide some protection from the effect of road salts. Then, instead of severely grading the western, northern and eastern boundaries of the site as currently planned, the edge of the facility could be defined with a retaining wall. This wall would rise from zero to a maximum of about 20 feet in the rear of the facility. The security fence could sit atop the retaining wall and the hedge (or other screening vegetation) would not need to be very tall to screen views because of the added elevation. Such site design will preserve much of the existing mature vegetation, which will screen the facility along with the existing terrain, and would also remove the risk of grading within the utility easement, permission for which has not yet been demonstrated.

Such rethinking of the screening of the facility is warranted because not only is the facility within the SPO and the green buffer, the Findings Statement states: “NYSDEC guidelines recommend a 500-foot separation distance between wastewater aeration tanks and public roadways, places of significant public use, or residential structures. This recommended distance is intended primarily to minimize the WWTP impacts of noise and odor on surrounding properties.” All of the tanks are planned to be outdoors between 100 and 200 feet from US 44, and the facility includes off-site structures that are within the 500 foot buffer. At minimum, extremely sensitive design for this use is warranted considering its possible impact on neighboring residents and the Hamlet of Amenia.

But is this a reasonable location for the WWTP at all? The following aerial photograph showing the tanks proposed for the WWTP with a 500 foot radius around the tanks shown in red:



Figure 12: Aerial view of the Hamlet of Amenia, with the proposed Waste Water Treatment tanks shown. The red line is a 500 foot buffer around those tanks

Is it reasonable to site a WWTP so close to residences on Lake Amenia Road? Is it reasonable to site a WWTP that will not be used by the Hamlet of Amenia so close to the Hamlet of Amenia? This location was selected, in part, because it was thought that proximity was important in the logistics required to hook a future hamlet wastewater system into this facility. But since the Town is no longer planning on using this facility, the Planning Board may wish to ask the applicant to consider moving the WWTP to another location entirely. Not only does the facility as planned violate NYSDEC guidance as to siting,⁹ it is very close to the Hamlet of Amenia, and the Planning Board can fairly ask if such a facility sited contrary to DEC guidelines is appropriate for this location. The applicant has already sited the golf maintenance facility off-site, so perhaps alternate locations for the WWTP could be developed as well.

The golf maintenance facility

The golf maintenance facility largely lies within the 500 foot Trail Scenic Protection corridor. While there are some trees between the facility and Route 22, they are not a very effective screen. While the plan shows that development is kept out of the green buffer, the facility itself with its material bays and storage areas should be screened from public view better than is currently planned. The applicant should develop a landscaping plan that screens this facility from public

⁹ NYSDEC guidance is stated in the 2009 Findings Statement. I understand that that NYSDEC siting guidance has been updated since the Findings Statement and that the current guidance is discussed in Julie Mangarillo's comments.

view which includes planting in the green buffer. Landscaping similar to what was proposed for the lower portion of Route 44 is appropriate in this location, or something more natural that enhances the sparse vegetation currently there would also be acceptable.

The plan shows piping being laid through the green buffer, trenching in three separate locations, which will clear some of the existing vegetation. I advise the Planning Board to ask the applicant move as many of these pipes as practical either along or under the entrance to the facility from Route 22, especially if the existing vegetation is planned to be kept for screening.

The applicant also needs to demonstrate that the facility meets the requirement of the OC district in terms of impervious surfaces.¹⁰

Lighting

In the context of visual resources, there is not a “right” answer when it comes to lighting design and the importance of a dark sky. We typically evaluate impacts on visual resources only during daylight hours, as that is the time when important visual resources can be seen. However, the Findings Statement puts many restrictions on lighting for the project, and the Town’s zoning requires lights be directed downward and shielded.

It appears that the lighting plan for the project does not consider the conditions of the Findings Statement, especially as it regards up-lighting. The following lists conditions of the Findings and a portion of the lighting plan that violates those conditions.

Findings: *No more than 300 lumens shall be emitted from any fixture between 80 degrees and 90 degrees. (0 degrees is straight downward from the fixture; 180 degrees is straight overhead.)*

The project proposes the “Square Gold Star LED” which produces 345 lumens and appears to be designed to be set at 180 degrees.

Findings: *No street or area lighting fixtures will be tilted upward to project light farther, since this can turn a good-quality fixture into one that produces glare or skyglow.*

In addition to the Square Gold Start LED mentioned above, the project calls for over 100 MR11 Halogen spotlights to up-light trees. The following image shows

¹⁰ According to measurements done by my office, I believe the plan does not exceed the 40% maximum impervious surface ratio if the portion of the golf course in the OC district can be considered part of the “project.” I believe it fails if the golf course is not considered part of the project. While it is not entirely clear in the zoning, I believe that the calculation should be based upon all the development planned for within the OC district regardless of if it done via a lot line adjustment or an easement.

how these spotlights are to be used. Both of these lights violate the Town's zoning 121-40(L)¹¹, which states that exterior lights need to be directed downward.

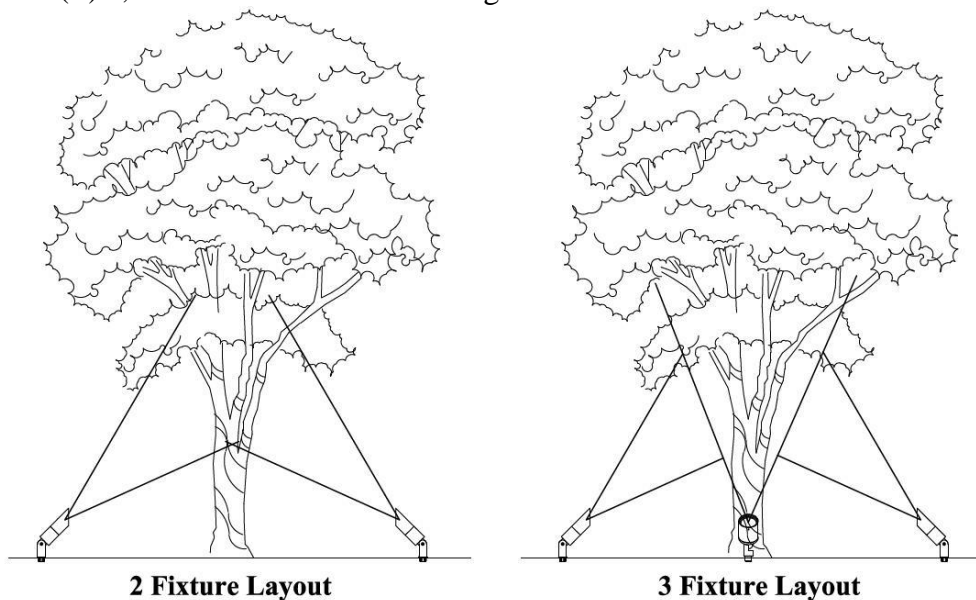


Figure 13: Detail from SL1.06 showing up-lit spotlights

Findings: *Wall sconces, post-top lighting, pedestal lighting, or hanging lanterns used outdoors for decorative purposes will be limited to 400 lumens per bulb unless they emit their light downward only.*

The proposed Banded Large Outdoor Sconce, which is not designed for only downward lighting, is listed at 1250 Lumens.

Findings: *Any façade lighting will direct 90% or more of its lumens toward the façade, allowing no more than 10% of the lumens to escape to the sky. Façade lighting will be minimal, using no more than 50% of the power allowed by the ASHRAE/IESNA 90.1 2004 Energy Standard.*

The applicant has not provided information to show that their plan will meet this condition of the Findings Statement.

Findings: *No more than 2% of the light (measured in lumens) emitted from the street lighting, area lighting (parking lots, storage areas, utilitarian building-mounted lighting, etc.) and path lighting will be directed upward. All of these fixtures will have “cutoff” optical systems that direct almost all light downward.*

The applicant has not provided information to show that their plan will meet this condition of the Findings Statement.

¹¹ 121-40 (L) “All exterior lighting, including security lighting, in connection with all buildings signs or other uses shall be shield and directed downward and away from adjoining streets and properties.”

These inconsistencies with the Findings Statement are noted in my substantive comments because the Planning Board may wish to ask the applicant to modify their proposal to match the Findings Statement, or the Board may change the Findings Statement to better match with the applicant's proposal, after the lights that violate the Town's zoning have been removed or changed. Again, night lighting is usually not considered a visual resource issue. Night skies and their protection are more of an issue of community character, and compliance with the lighting performance standards in the Town's zoning.

Design to mitigate visual impacts

In my opinion, the portion of the development which has the largest impacts on visual resources is the Phase 2 Estate Homes. These homes are not in the detailed site plans prepared for Phase 1, but are included in the confirmatory visual analysis and the Master Development Plan for the project.

These Phase 2 Estate Homes are visible from Delavergne Hill and Depot Hill and will require extensive clearing and disturbance to make these sites buildable. The clearing and retaining walls required would likely be similar to what is seen on lot E-48, which was discussed earlier. The following combines the Phase 2 Estate Homes with the neighboring Phase 1 areas:



Figure 14: Detail of MDP SP-04 combined with the C7 series

The 2009 MDP plan while showing this area developed did not include the 26 houses that are currently planned here and instead called for 17. Further, most of these 17 were moved into this area based upon the 2009 Findings Statement; only a handful were studied in the FEIS for the project.¹²

The following image drapes the plan for the area on the Google Earth elevation model for the town, and is designed to illustrate the topography in this area in 3D:

¹² Either four or six depending on how the houses were counted.

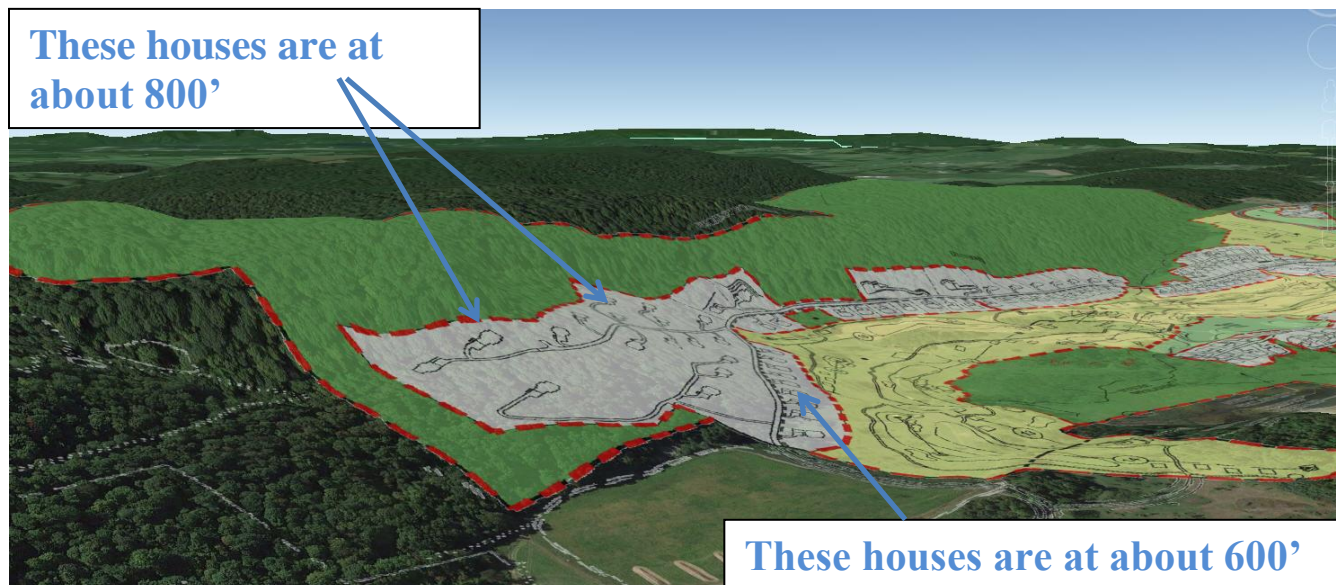


Figure 15: MDP SP4 draped on Google Earth elevation model of the town, to demonstrate the issue with changing elevation in 3D

The houses that line the golf course are at about elevation 600 feet. The houses at the highest portion of the development are at about elevation 800 feet. The changing elevation means that houses cannot be used to hide each other and appear to climb up the hillside as seen in photosimulation:



Figure 16: Detail from Photosimulation of Viewpoint 7 (from Depot Hill). Blue lines show how changing elevation makes houses appear to step up the hillside

This section presents alternative plans for these Estate Homes that would lessen their impact on visual resources. These designs would likely cause less disturbance and create more land for open space. They have not been engineered, of course, and may not be realistic given the particulars of a given site, but are inspired by the idea of the cluster development encouraged by the Town's zoning. They are derivative, meaning they are based upon the MDP design and are not radically different in spirit or form.

Alternative 1: Keep 26 houses in this area as proposed, but relocate houses off the highest points to reduce visibility and lessen the footprint:

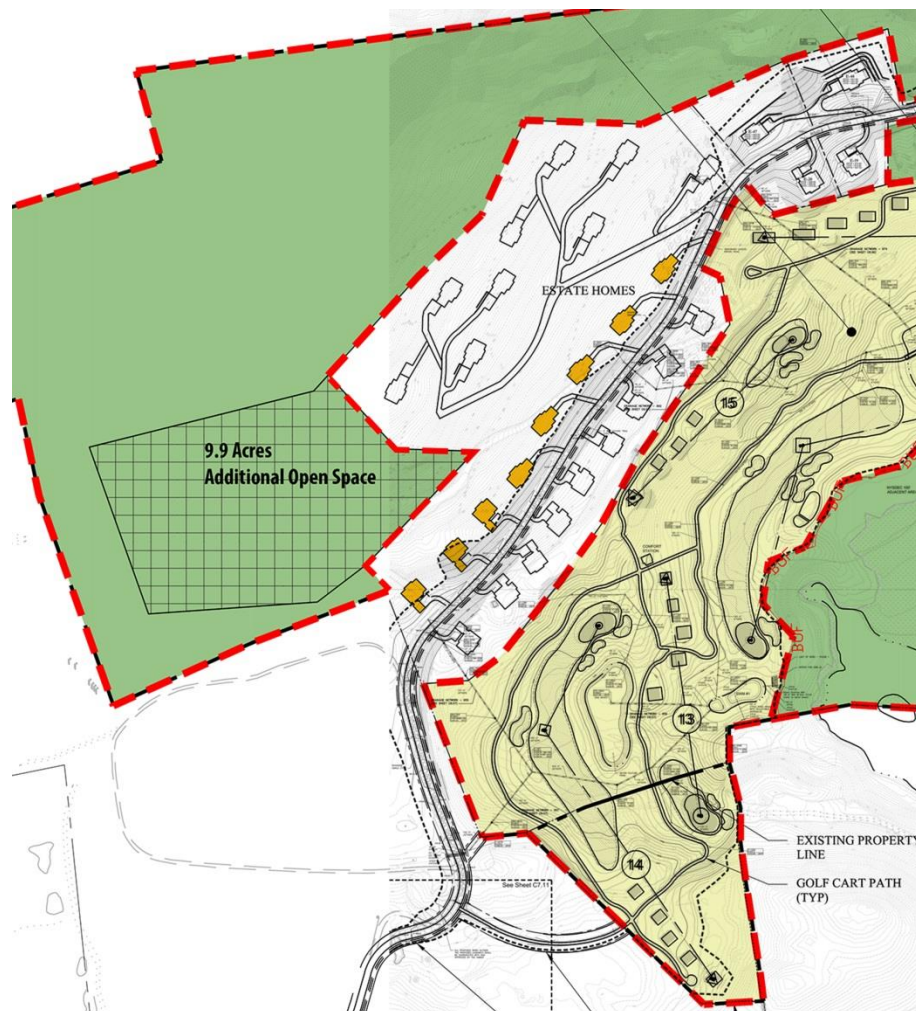


Figure 17: Alternative 1, which keeps the 26 houses in this area, but moves several to the access road for the project, which increases the amount of open space by about 10 acres

This alternative simply removes the middle road planned for the hillsides, and moves the houses planned there to double-load the southern access road (shown in orange). It also clusters the upland houses in groups of four off of a shared access. This change would add another 10 acres into open space, but would still show houses climbing up the hillside.

To be clear, I am not saying that sites on the western side of the access road are good sites for development; they are very steep and they would be difficult development sites, similar to E-48, E-49, E-50 and E-51. But the sites at higher elevations would likely require even more disturbance, in addition to requiring an additional access road.

Alternative 2: Keep 26 houses in this area as proposed, but make a lot line adjustment so that houses can line the access road to the south:

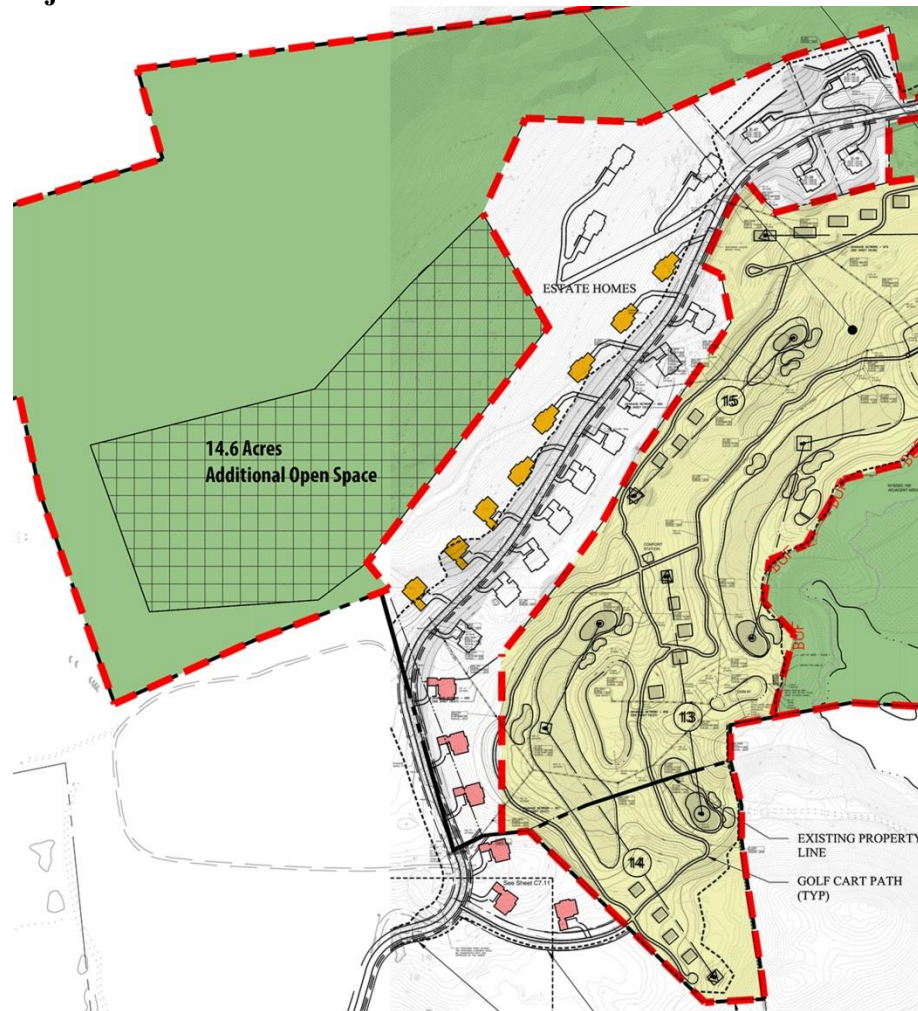


Figure 18: Alternative 2: Remove six houses from the higher elevations to the access road to the south. This would require a lot line adjustment and the upgrade of a golf cart path

In Alternative 2, in addition to double-loading the access road, six of the houses from the highest area would be moved to lower elevations, five off the access road and a sixth off what is now planned as a golf cart path, which would have to be improved. Alternative 2 adds close to 15 acres to open space and removes the vast majority of houses from the highest elevations. While there would still be a couple of houses stepping up the hillside, a design like this would materially shrink the area that is impacted.

Alternative 3: Keep the number of houses the same as in the approved MDP and cluster them along the access road

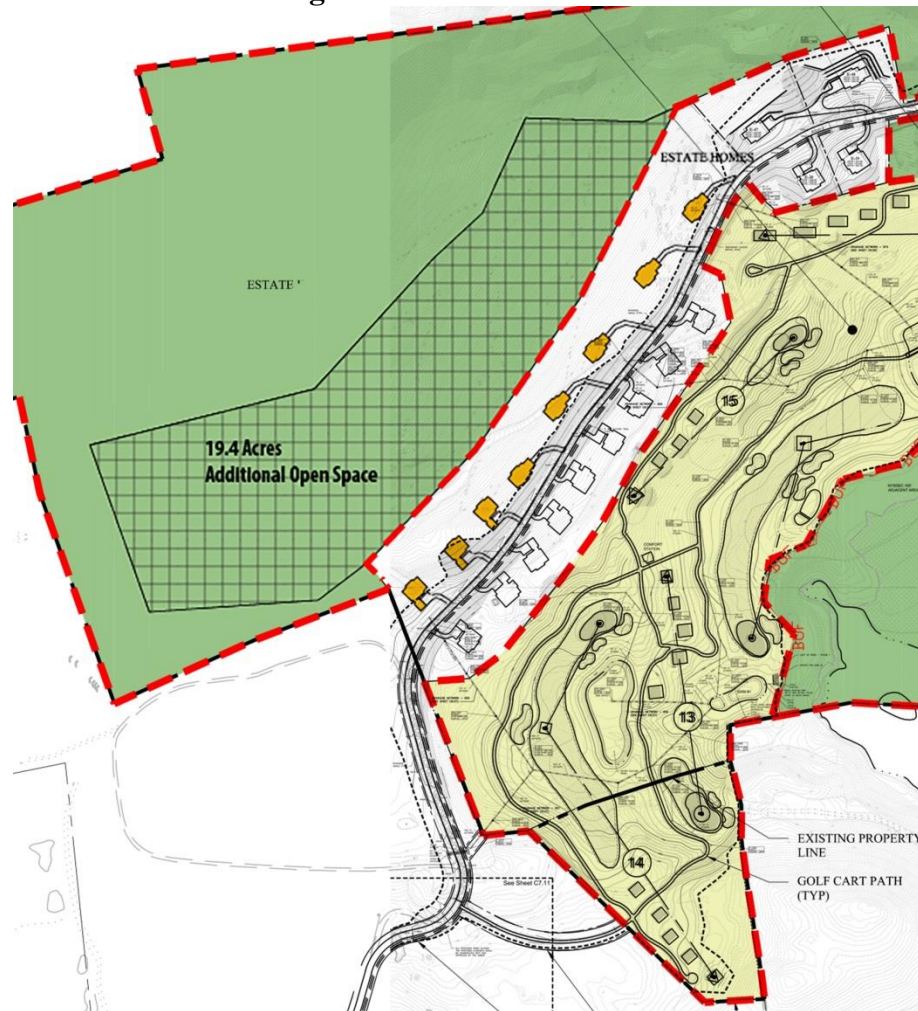


Figure 19: Alternative 3: Double-loads the access road and removes all houses at higher elevation. Reduces the number of houses in this section to the approved MDP

The 2009 MDP for the phase 2 estate homes shows only 17 houses, not the 26 shown in the current MDP. Alternative 3 starts with the 17 houses that were approved in 2009 and removes all the houses from the highest elevations. The fewer number of houses removes the need for Alternative 2's lot line adjustment. Alternative 3 adds over 19 acres to open space and keeps access to all of the estate homes from the main access road. Alternative 3 changes the layout of the 2009 MPD, which while including some houses on the access road, also showed houses further up the hillside. The following shows the 2009 MDP with the Phase 2 area highlighted. Houses outside this highlighted area are in Phase 1:



Figure 20: Detail from 2009 approved MDP with Phase 2 estate home area hatched. Houses outside the hatched area are in Phase 2

As stated previously, these alternatives are just concepts considering ways that plan changes could reduce the visual impacts of the project, while not radically changing the overall character of the development. A design that followed Traditional Neighborhood Design principles as detailed by the Town's zoning would likely have a greater reduction in visual impacts for the project overall, but the point of this exercise was to show that even modest changes could:

- Remove houses from the highest elevations
- Reduce the amount of disturbance
- Reduce the visual impact
- Increase the amount of open space

If these issues are important considerations for the Planning Board, then I encourage this Board to engage the applicant in a dialogue to discuss changes that are mutually agreeable.

Close

Thank you for the opportunity to contribute to this important project. Please contact me should you have any questions.

Sincerely,

George M. Janes, AICP
George M. Janes & Associates